Lectures on Surgery by Wm. Gibson. M.D.
University of Pensylvania Course 1822&23

Ignatius P. Garvin

Philadelphia

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Philadelphia Jan 3d. 1823

(Fractures (Dislocation

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Dr Gibson's Lectures

Jan 5th. 1823

Dr M. Pherson's Surgical Lectures

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Dr Gibson's Lectures

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Lect	Monday, Tuesday, Thursday & Friday	from 9 till 10
Gibson	Do Do Do	Do — from 10 till 11
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Gibson on Inflammation

By inflammation is understood the state of a part which is painful, redder, hotter and more turgid than it naturally is, which topical symptoms when present to any considerable degree or when they affect very sensible parts are attended with fever or a genral diseased action of the system. The susceptability of the body for inflammation is of two kinds the one original & beyond the reach of human investigation the other acquired from the influence of Climate, habits of Life state of the mind over the constitution. The first kind being innate cannot be diminished by art, the second may be lessened by avoiding the particular causes upon which it depends Inflammations are divided into Healthy and Unhealthy into Acute & Chronic. he considers Inflammation a diseased action & for that reason does not believe in healthy inflammation The nearer inflammation is situated to the heart the more favorable will it terminate. There are exceptions to this rule as when inflammation

attacks parts subservient to life as the Lungs, Brain Stomach & the stronger the constitution the more favorable will it terminate. Inflammation may terminate in eight different ways viz. by resolution Adhesion, Suppuration, Extravasation, Cicitrization Ulceration, Granulation & Mortification. Inflammation when seated in highly vascular & organised parts is more disposed to take a prosperous course & is more governable by art than in parts of an opposite texture; hence inflammation in the Skin Cellular Substance, Muscles &c often ends more favorably than &c in bone, tendon, fascia & Ligaments. It is more managable by Surgery for those parts of the body which are not what the Anatomists call vascular seem to enjoy only inferior powers of life & when excited to Inflammation most commonly end in mortification. The proximate cause of inflammation is thought to be an increased action of the vessels of the part the remote causes are divided into Chemical and Mechanical. Under the first head are Burns, Scalds Canthariades & under the 2d are included wounds,

bruises & all kinds of external violence. The pain in Inflammation is Attributed to the spasm & unnatural situation of the nerves, the tumefaction to the extravasation of serum & coagulable lymph & to the dilatation of the vessels of the part. The heat never transcends the heat of the Animal at the source of circulation. Healthy Inflam. is always with me a mere of the following effects as adhesion of the inflamed parts one to another, the formation of pus, the removal of a portion of the body by absorption. The uniform occurrence of these effects induced Mr Hunter to describe Inflammation in 3 different stages the Adhesive, Suppurative & Ulcerative stages. The various parts of the body differ in their susceptibility of adhesion, Suppuration and Ulceration. Cellular membrane, the circumscribed cavities of the abdomen, Thorax, Tunica Vaginalis very readily form adhesions. Mucous membranes on the contrary, as the mouth nose, alimentary canal the air cells of the lungs & trachea, the Urethra & bladder adhere but suppurate readily. It is generally found that deep seated parts suppurate less readily than the superficial thus if a musket ball be lodged at

any considerable depth in the body it excites adhesive inflammation & a cyst forms round the bullet. But if it be lodged nearer the surface it produces suppuration & an abscess forms and it is discharged. The symptoms of Inflammation which have been discribed exist very evidently in the adhesive stage, but when suppuration is about to commence they are greatly aggravated. the pain & throbbing become more violent, the heat is increased, the swelling more prominent, the color more intense approaching to a pale scarlet. Shivering fits come on. the swelling grows softer & matter is formed. Fluctuation may be perceived by examination with the finger an immediate abatement of the symptoms now take place. If the inflammation be seated in the cellular membrane the process of ulceration now commences & the absorbents remove the solid part to make room for the lodgment of the secreted & also to prepare a way for its escape In this manner an abscess is formed which may be defined a circumscribed cavity containing pus. In the common phlegmonous abscess we

have a good example of the 3 effects of inflammation which have been briefly noticed at its margin. When the inflammation is least violent the inflamed vessels secrete coagulable lymph which agglutinates & firmly unites the cells of the cellular tissue circumscribing the cavity & preventing the escape of pus into the surrounding parts. Towards the centre of the abscess inflammation has transcended the adhesive stage & the bloodvessels have relieved themselves by a secretion of pus. The most common form in which inflammation terminates is resolution. In this case all the symptoms gradually subside & the parts are restored to colour & appearance. The secretion of pus already noticed is to be considered as one of the terminations of inflammation also a secretion of serum frequently puts a stop to the inflammatory process the inflammation of Cantharides terminates in this way. Instances of this are also seen in Inflammation of the Brain ending in Hydrocephalus in the thorax terminating in Hydrothorax. Hemorrhagy has occurred in some cases & put a stop to the inflammation. Hard tumors occasionally form by the secretion of

Coagulable lymph in the interstices of parts & this has been called a termination of inflammation in Schirrus. In other instances the violence of action & the kind of action exausts the vital powers of the inflamed parts & the Inflammation terminates in Mortification.

Treatment of Inflammation

In the treatment of inflammation the first object is to remove if possible the exciting cause if that continue to act the next is to lessen the inflammatory action. The remedies to effect this latter are General or Constitutional and Local. Those which act on the Constitution are Bloodletting, this is a powerful remedy in the treatment of Inflammation. The quantity of blood to be drawn & the frequency of its repitition can only be estimated on the violence of the inflammatory symptoms. Whenever parts especial to life are inflamed as the Brain, the contents of the Thorax & Abdomen are heated and copious bloodletting is necessary. Cathartics tends to diminish the quantity of the blood to lessen inflammation & should be freely exhibited.

often necessary in the treatment of inflammation but is often inconvenient as in fractured bones bloodletting must therefore be substituted. Certain neutral salts as the Sulphas Sodæ, Sulphas Magnesiæ & Nitras Potassæ are useful when combined with the Tartris Antimonii in which case they occasion nausea & diminish the action of the bloodvessels. Rest is essential. For motion occasions irritation & many inflamations are found difficult of cure because the inflamed parts cannot be kept at rest. Fistula in Ano affords an illustration of this remark

Position The posture of the body should be such as to favor the return of blood from the inflamed parts. This is found to be very beneficial as the elevation of the feet in cases of inflammation of the lower extremities is found very successful

Opium may be given to relieve pain in some cases. The local remedies are bleeding from the inflamed parts by cupping, leeches and by scarification. Local bloodletting has been found more effectual after general bleeding has been premised. Cold applications are

sometimes sensible but they should only be carried so far as to be pleasant to the feelings of the patient A very common application is the Cerussa Acetata in solution in cold water with the addition of a little vinegar to reduce the temperature of the inflamed parts, or about 3ij of Sugar of Lead in 3iv of water. Blisters, in certain cases, are of great use in diminishing inflammation, They must be applied directly over the inflamed part and in many cases produce a speedy cure. These are the remedies employed in bringing about a termination of the inflammation by resolution which sometimes cannot be obtained and Suppuration comes on

On the Suppurative Termination

When inflammation continues any length of time with violence without resolution or Adhesion we may expect that suppuration is about to take place. The inflamed part becomes soft, the pain is also very severe with a throbbing sensation, the abscess becomes conical and more pointed. Even when the

Inflammation is not very great Rigors take place the coldness is according to the extent of the Inflammation. Rigors seldom take place in the suppuration of wounds. The cause of rigors is not well known The time of the disease at which suppuration takes place is various being dependant on the degree & extent of the inflammation. In some cases it lasts only a few days in others, several years The Cellular substance is the most common seat of inflammation of the Suppurative kind Adhesion takes place to prevent the spreading of the pus through these parts. Pus is never produced except thro' the medium of Inflammation. It is said that pus consists of small globular bodies frequently mixed with the globules of the red blood. Pus has a greater tendency to putrefaction than any other fluid especially when mixed with blood. When first discharged from a sore it is inodorous but on exposure to the air a short time it becomes putrid. Pus when first discharged professes neither Acid nor Alkaline properties

but on exposure to air it becomes so acid as to change vegetable blues to a Red. Ichor is a thin, acrid watery discharge. Sanies is a foetid liquor mixed with some of the blood. Sordes of a grey colour and very offensive odour. Sal Ammoniac regulates pus but not mucus. It was the opinion of Mr Hunter & others that pus was secreted from the arteries & that a glandular structure was not necessary for its formation. If there is no chance of producing Resolution or Adhesion we must then encourage Suppuration. The means of doing this are of two kinds Constitutional & Local When the patient is much debilitated from the preceding evacuations we must give him animal food, Wine. Tonic medicines will also be found serviceable also Opium to allay the pain. The local applications are Fomentations & Pultices. the pultices may be made of bread & milk with the addition of a small quantity of Olive Oil or hogs lard to prevent their sticking to the parts. As their good effects depend upon their heat & moisture they should be

renewed when they become dry & cold. If the inflammation is languid their heat should be increased & vice versa. In wounds which are disposed to suppurate the Linseed poultice is the best application. If the Suppuration is to profuse it must be moderated by the removal of the poultices & other applications. In all extensive suppurations hectic fever is apt to make its appearance. It is occasioned by constitutional Sympathy with local irritation

Of Gangrene & Mortification

By mortification is meant the entire death of a part of the body. Gangrene is that condition which immediately precedes it. Mortification is of 2 kinds the one is not preceded by Inflammation, the other is increased action, & diminution of power is the cause of Mortification preceded by inflammation. When any part of the body loses all motion, heat & sensibility & becomes of a brown, livid, or black colour it is said to be affected with Sphacelus as long as heat, sensibility & motion remain it is said to be affected

with Gangrene. Sanguene does not always terminate in Sphacelus nor is Sphacelus always ~~terminate~~ preceded by Sangrene. The primary cause of spontaneous mortification is not well understood some attributing it to putrefactions of the Fluids. Bread, made of bad black wheat or Rye is sometimes thought to be the cause. The external causes of Mortification are Chemical or Mechanical. Under the first head are heat & cold under the second are burns, bruises &c and of all inflammations none is more apt to terminate in Mortification than Erisipelas especially if combined with Phlegmonous inflammation. If a part of the body has been exposed to ~~heat~~ cold & heat is suddenly applied it will be found invariably to mortify. In some cases Mortification has been brought on by mere debility. This last kind is not preceded by Inflammation. Continued pressure on a part of the body occasions mortification. This is seen in the hips & backs of patients who have been long confined to one posture in bed as in cases of

fracture. The Symptoms of Mortification are as follows. If pain & inflammation of preceded by inflammation. the pain & fever suddenly diminish the parts effected become soft & of a livid color retaining a small share of its warmth & sensibility the cuticle becomes detached & vesicles arise on the surface filled with a turbid fluid. This is the state to which the term Gangrene has been applied Mortification is divided into humid & dry. Dry ngrene is never preceded by inflammation but is most commonly by the flow of Blood being stopt by compression of some kind. It sometimes comes on without any evident cause as that kind described ~~as that kind described~~ by M^r Pott. It sometimes spreads with great rapidity at other times very slowly. It is as fatal as that preceded by Inflammation. The danger is never over until the dead parts seperate from the living. The external parts as the cellular membrane may become sphacelated without the parts underneath as the Muscles Tendons &c sharing in the disease. In all cases of Mortification the patient must be considered in

imminent danger, even after the seperation of the dead parts from the living has taken place, as patients have been known to die suddenly in consequence of the absorption of putrid matter spreading on the Nervous System

Treatment of Mortification

It may be divided into constitutional & Local remedies Under the first is comprehended remedies which are indicated by the state of the System. If there is great excitement present with a strong, full and hard pulse bleeding will be necessary, also purging low diet. In all cases their effects must be watched as Symptoms of great prostration are apt to follow in that kind of mortification preceded by Erysipelatous inflammation. Emetics will be found useful but if they should operate in the bowels & cause symptoms of debility, they must be immediately left off. Recourse should be had to tonic & antiseptic remedies. The first that offers itself to the consideration of the Practitioner is a generous diet with a moderate quantity of wine also the Peruvian bark. The volatile alkali

has been found of great service. The Bark is sometimes of very little use especially in that kind brought on by external causes & also that kind described by M^r Pott. In mortification accompanied with Typhoid Symptoms it will be found of great utility also the Volatile Alkali, wine & opium together with the topical application of Blisters In mortification commencing in the toes attended with great pain & Irritation large doses of Opium have been recommended. D^r Gibson relates the case of a woman who had been under his care sometime ago in the Alms-House who used to take upwards of 600 drops of Laudanum in 24 hours. She lived about 12 months & finally died. Sometime before her death she removed several of the toes by means of a pair of Scissors. This patient would not submit to amputation. He also relates the case of a gentleman from York County Pa who was affected with the dry gangrene. It progressed very slowly at length a line of separation was found between dead & the living parts. The diseased parts were amputated & the patient got quite well.

As a tonic remedy the Sulphuric Acid has been found usefull, Carbonic Gas. Camphor has been recommended in all cases of Mortification. Opium with or without Ipecacuanha must be given to allay pain.
The local remedies are the removal of all ligatures tumors, poisonous substances &c In Mortification preceded by inflammation the application of a solution of Sugar of lead in water with the addition of Vinegar also Fomentations & poultices is usefull
The Charcoal poultice has been found very serviceable It is made by stirring up 3ij of this Substance in Powder with a pound of the Flaxseed poultice
It will be found of great service in arresting the Fetor. Blisters have also been found usefull
In parts which threaten mortification from intense cold the part should be placed like in cold water or Snow & the heat gradually increased
In all cases of Mortification Amputation should not be performed until the disease has stopt progressing & a line of Separation has formed between the living & dead parts.

On Ulcers

Ulcers mean a Solution of Continuity in a part attended with a secretion of Pus or Sanious discharge. They are divided in the following manner, Healthy Unhealthy & Specific When Ulcers take place in Gouty habits & the regular paroxysm of Gout leaves the person, in such persons the healing of the ulcer is improper. The lower classes of people suffer most such as Labarers & Sailors Simple or Healthy Ulcers are most commonly brought on by wounds which do not heal by the first intention. In Healthy Ulcers the granulations are small, florid & pointed at the top. The pus is of a white color. When the granulations have risen to a level with the sound parts they put on a disposition to form (a cicatrix) cuticle

Treatment of Healthy Ulcers. If constitutional symptoms are present, constitutional remedies must be resorted too. The local applications must be of the mildest kind, such as a little lint spread with calamine Cerate. He also recommends pressure by compresses laid on each side of the ulcer & bandages also adhesive straps. Applications in

the form of vapour should not be employed as they under the texture of the granulations loose & diminish the tendency to form skin. The articles employed should be free from rancidity. Powdered Calamine & Rhubarb may be employed. Irritable Ulcers

The appearance of Irritable ulcers are, ragged edges pale granulations of a whitish hue discharging a thin serum & excessive pain. If a fungus arises it bleeds on being touched. The Treatment divides itself into constitutional & Local. Gibson recommends moderate purging after which wine & other Stimulants & tonics must be given. The local remedies are the Fomentations & Poultices, Common Goats. When the granulations become large the poultices may be left off & the Carrot Poultice substituted. While the granulations are small & the Ulcer diminishing they may be continued. When the weight of the poultices cannot be borne the following may be employed

Vin Opii
Pulv Opii
Sol. Sac Saturni
Ext Cicutæ

} By applications such as Carbons, powdered Opium, Lapis Calaminaris, Pulv Rhei Preparations must be avoided. When the poultices disagree it should be smeared

with cream. Languid Ulcers

The granulations of Languid ulcers are larger and rounder & of a less compact texture than those of a Healthy Ulcer. Large insulated masses appear raised above the surface & are often suddenly absorbed. The lower extremities are more prone to ulcers than of this kind than any other part of the body. Treatment.

Bark & Iron must be given, wine & cordial is necessary Porter may be given to the poorer classes as it is better adapted to their circumstances. The topical applications must be of the stimulant kind as Basilicon Spts of Wine & Myrrh. they should be applied cold. Solutions of Nitrate of Quicksilver, Mur Mercury, Spts Turpentine Decoction of Bark. dry applications such as Chalk Bark, Lapis Calaminaris, Carbon, Pulv Rhei which is strongly recommended also dry Lint

Indolent Ulcers The appearance of Ulcers are as follows the granulations are smooth & glossy. The edges of the surrounding skin are thick, smooth, prominent & rounded. The discharge is thin and watery consisting of a mixture of pus & coagulable Lymph. Treatment. Poultices of and Fomentation

The application of warm Vinegar, Ung. Nitrat. & Z Myrrh. diluted Vitriolic Acid, Cayenne pepper, Nitric Acid diluted in proportion as one to 10 of water Lime Juice, Solution of Muriate of Mercury, Zinci Sulph. & common Salt. Adhesive Straps & Bandages are particularly recommended.

On Burns & Scalds

Burns are among the most dangerous & common accidents to which we are exposed. They are divided into those which affect the Superficial & those which affect the deep seated parts. The larger the Surface even though it be superficial the more dangerous is the effects in the human subject. The Skin & Lungs are both destined to separate from the circulation a aqueous exhalation & perhaps it is on account of those participating in the same function, that extensive burns seem to affect the organs of Respiration. Certain it is that burnt patients often die with Asthmatic Symptoms Whether we refer the fact to what I have just stated or to an inexplicable Sympathy between the lungs & the Skin is of no very material importance.

In all extensive burns adhesions are very apt to form especially between the toes & fingers. Treatment When the surface is not very extensive & no constitutional Symptoms as tremors or difficult breathing are present & the cuticle not destroyed the application of Cold water or other cold substances as scraped potatoes will be found useful. They will often prevent the formation of vesicles on the other hand should the patient be seized with Rigors & difficult breathing his pulse small & scarcely perceptible & the patient lying in a Comatose condition in such cases all cold applications will be highly improper. We must in such a state of things endeavor to excite the reaction of the System by the administration of Cordials internally & also by stimulating local application as warm Spt Turpentine, warm Vinegar, warm Brandy. Small doses of Tr Opii will be found servicable in relieving the Comatose state which extensive burns are generally attended with If Reaction takes place & is excessive, Bleeding, Purging & Diaphoretics should be employed. In applying the stimulating local applications

care should be taken that they do not get in contact with any of the sound part of the cuticle If vesications should form they may be opened with a fine cambric needle & afterwards dressed with Basilicon Ointment to which a little Spts Turpentine may be added. If a hard eschar or scab should form, a poultice may be employed after which it may be dressed with the Basilicon on lint or old Linen. The ulcers left by burns have some peculiarities. They shoot out fungous granulations which do not readily cicatrize & when the ulcers do heal they contract so much as in many cases to occasion great distortion. To arrest the progress of the growth of fungus prepared Chalk should be sprinkled over the sore & if this is not sufficiently powerful Burnt Alum or the common escharotic preparations may be used. In Burns of the inferior extremities extension should be constantly kept up and in the Superior extremities flexion. In Burns & Scalds of the hands care must be taken to prevent the fingers from adhering by applying between them lint dipt in a mixture of common Linseed Oil and

Lime water. Afterwards a splint made in the form of the hand with excavations for the fingers. The toes may be treated in the same way with the exception of the splints. If they should adhere we must cautiously dissect them loose & prevent their reunion by proper dressings. If burns should become indolent ulcers they may be treated in the way such ulcers usually are by the application of Lunar caustic. Adhesive shaps &c In simple burns raw cotton has been found serviceable. If vesications are formed before the application of the cotton, it will be found to absorb the contained fluid. If the vesications are not formed it will often be found to prevent it them from forming. In all burns if the surface be large, the patient seized with Rigors, the breathing difficult, the pulse small & scarcely perceptible & the patient lying in a Comatose state without complaining of pain in such cases very few will be found to recover. Gibson says he has never seen an instance of recovery from such a state. He relates the case of a girl 15 years of age who was admitted into the Alms-House sometime ago. She was affected in the way above mentioned. All kinds of Stimulants were employed without

Effect. reaction could not be excited and she died on the third day after being admitted.

On Wounds

A wound is a recent solution of continuity in a part. Wounds are divided into the following manner. Incised, Punctured, Contused, Lacerated, Poisoned, and Gunshot. The degree of danger attending wounds depends on the following circumstances, the extent of the injury, the violence the parts have suffered, the nature of the bloodvessels & nerves which happen to be cut or torn, the nature of the wounded part in respect to its power of healing, the sympathy of other parts necessary to the operations of life with the injured parts, the age of the patient & the goodness or badness of his Constitution.

On Incised Wounds

They are less dangerous than any other kinds of wounds When the fibres are divided without Laceration a Contusion the less danger there is of Inflammation or Suppuration & most commonly admit of uniting by the first Intention A Surgeon called to a recent Incised wound has 3 objects to accomplish, first to put a stop to the hemorrhage 2nd to remove extraneous substances 3rd to approximate

the sides of the wound. In this way union by the first intention may be effected which is in almost all cases a desirable event. It is probable that the blood serves the bond of union. In some instances union by the first intention does not take place but Adhesive Inflammation is the consequence. In this case Coagulable Lymph is thrown out & serves the bond of Union. This is the opinion of Mr Hunter In cases of Incised wounds when it becomes evident that union cannot be effected without Suppuration the adhesive Straps must be removed & all irritation & a soft poultice substituted When Suppuration is fairly established & granulations begin to form the means already recommended for retaining the sides of the wound in contact are to be resumed & a cure will generally be soon effected

On Poisoned Wounds

Poisoned wounds are those attended with an introduction of certain healthy or Morbid secretions of Animals or Vegetables capable of producing disease & death as the bite of a venemous reptile, of a rabid Animal or a wound with poisoned arrow, the sting of a bee, Wasp a Hornet, the bite of Muscheloes & certain other insects

In wounds of this kind medical [illegible] requisite. If it should. Cold applications. Solution of Sugar of Lead, Spirit Ammonia & Opium. When the patient has been attacked by swarms of these insects the head face and such parts bleeding & purging becomes necessary. The rattlesnake, one of the most venomous reptiles, is found in many parts of this Country its bite is extremely dangerous. As the poison of the Rattlesnake exerts its principal effect on the Sanguiferous System immediate care should be taken to cut of the circulation. A ligature should be immediately tied firmly round the limb & the bitten part extirpated. Should the glands in the groin swell a blister may be employed & the Volatile Alkali given internally. Arsenic has been recommended. Mercury is also found serviceable. Sweet oil has been recommended after the extirpation of the bitten part. The lunar Caustic may be employed.

On Contused Wounds

In contused wounds besides the solution of Continuity there is an injury of the adjacent flesh greater & less according to the violence of the force employed. Wounds made with sharp instruments are frequently attended with retraction of the divided parts & profuse Hemorrhage

But it is known at the same time that they are generally capable of being united by the first intention. It is almost a constant effect of contused wounds to flow with very little blood even when important Blood vessels have been injured Whole limbs have been torn from the body without inducing Hemorrhage. The Surgeon should not be deceived by the absence of this symptom, for he knows that in proportion as the bleeding from contused & lacerated wounds, is trivial the violence done to the injured parts has been great. Treatment The indications of cure are to prevent excessive Inflammation, to wait for the separation of the contused parts & when Suppuration is established & granulations form, to approximate and retain in contact the edges of the wound. The best application is a bread and milk poultice. If the inflammatory symptoms run high Blood will be found necessary If great pain and irritation arise Opiates may be given Should Gangrene be the result a blister may be applied

On Punctured Wounds

Punctured are not only dangerous on account of their frequently extending to a considerable depth and injuring

important bloodvessels, nerves and viscera. They are dangerous inasmuch as they frequently give rise to very extensive Inflammation and sometimes Tetanus. It is not uncommon to see formidable collections of Matter follow wounds of this description, especially when the instrument with which it has been made has penetrated to any depth into an Aponeurosis or Fascia. Stabs and all other punctures are not simple divisions of the fibres of the Body They are attended with more or less contusion or Laceration hence there is not the same readiness to unite which we observe in wounds made with sharp cutting instruments & when ligamentous expansions are among the injured parts both the structure of the injured parts & the nature of the wound itself often produce severe Constitutional & Local Symptoms. Treatment In the first stage of punctured wounds the indication is to guard against the attack of violent Inflammation. When no considerable quantity of blood has been lost General & topical Bloodletting should practiced in fact the Antiphlogistic regimen is to be strictly followed. We should endeavor to produce Adhesion by the first intention by approximation of the sides of the wound with strips of Adhesive plaster and gentle compression applied along the whole course

of the wound. A state of rest is to be observed. If the pain is very great Opium is to be given Sometimes union of the first intention will take place. More frequently in cases of deep stabs the pain is intolerable & Suppuration takes place. In such cases Poultices will be proper When convulsions or great nervous irritation follow, the dilation of the wound frequently puts a stop to these Symptoms. A small incision upon a probe passed into the puncture will suffice for this purpose when the last mentioned wounds occur in extremely hot weather it will be safest to enlarge them with a scalpel & to apply Stimulating substances to excite inflammation. it will often prevent Tetanus. Erisipelatous inflammation follows punctured wounds especially of the scalp an enlargement of the wound has been found useful with the application of a blister to the inflamed part If any large blood vessel has been opened it must be sought for by dilating the orifice of the wound with a probe & Scalpel. The vessel being exposed it may be tied with a ligature. In some cases the bleeding is at first profuse & gradually ceases When it ceases the patient must be kept quiet and watched carefully as a return of the Hemorrhage

is to be apprehended. If the puncture be on a limb a Tourniquet may be applied loose so that an assistant may have it in his power to put an instant stop to the effusion of blood until the artery is secured by a Ligature.

On Lacerated Wounds

They are pretty much of the same nature as the Contused Lacerated wounds may frequently unite by the First Intention In all lacerated wounds especially of the scalp we should endeavor to promote Union by the First Intention if we should not succeed no harm will result from the trial. if it should succeed we save our patient a great deal of trouble. If Inflammation should come on we may treat it in the same way recommended in Contused Wounds

On Gunshot Wounds

They are produced by hard obtuse bodies projected from some species of Fire arms Violently, penetrating the living solids. The difference of Gunshot wound are reducible to 3 principal causes 1st the kind of body projected 2d the velocity of the body 3d the nature and peculiarities of the part injured. Bullets are the bodies which most commonly cause these wounds but they may be produced by Cannon balls, broken Shells & on board of a Ship by splinters of Wood

Pieces of cloth are often carried into the wound. At the entrance of a ball the circumference is usually depressed on account of its getting into a denser medium, at its exit prominent on account of getting into a rarer medium. When the ball moves with little velocity there is less Sloughing than when it penetrates with rapidity. On account of the parts surrounding a Gun Shot wound being deadened the nature of the injury cannot at first be comprehended. Some viscera a large artery or even a bone may be deadened by the violence but the mischief does not manifest itself until the separation of the slough takes place. When a gunshot wound only injures soft parts of ordinary importance it is termed Simple when at the same time it fractures a bone or wounds a large artery or nerve or viscera it is called compound. When a cannon ball tears off a whole limb it may cause a concussion of the whole body in a very violent degree and a universal of the Animal functions. Treatment. The first thing in the treatment of gunshot wounds in one of the extremities is to determine whether it is more advisable to amputate the wounded limb immediately or to undertake the cure of the wound.

When the ball lodges in the wound & can be removed without difficulty it ought to be removed well immediately. The course of the ball is extremely irregular. When we are not able to find it, in such cases we may perceive it when it has not penetrated to any considerable depth by a red line extending from the spot where it has entered to that at which it has Lodged or Escaped If the ball is lodged deep in the substance of the thigh or any other part it would be improper to dilate and cut it out but if lodged superficially it should be cut down on and extracted. The best local application is a Poultice of Bread & milk or Linseed to be continued until the Sloughs separate and Suppuration is established. The treatment is to be the same as any other contused wound. The state of the constitution is to be attended to. When there is reason to apprehend that an artery of any size has been injured we must attend to the separation of the sloughs as it may be followed by a fatal Hemorrhage Bleeding seldom takes place immediately after the reception of the wound but mostly after Suppuration has taken place.

On Cancer.

This disease is divided into 2 stages viz. Schirrus & Cancerous by first is meant a hard indolent [illegible] parts but mostly in Glandular Structure such as the breasts in women & testicles in Men There are some parts which are exempt from Cancer as the Brain, Liver & Spleen. Schirrus most commonly begins by a small hard indolent tumor with unchanged surfaces after becoming of some size It turns of a livid colr something like Lead continuing to enlarge it becomes painfull and distressing to the patient. The pain is of a peculiar kind as if something were darting through it. It is termed lancinating If a section is made into the substance of the tumor it will be found hard & indolent in the centre with lines extending from the circumference towards the centre. After taking on the ulcerative process the indurated centre becomes changed into a fungous substance discharging a thin foetid Sanies of a peculiar odour Sometimes granulations shoot out with great rapidity & seem to assume a healing aspect but much oftener it assimilates the neighbouring parts in its ravages with wonderfull rapidity. Doubts have been entertained

of its being of a local nature in its commencement. It is of this kind but when the glands become diseased it is doubtful as to its locality. Gibson does not consider it as a hereditary affection. This disease is sometimes confounded with Syphilis & Fungus Hematodes. From the first it may be distinguished by the slowness of its formation from the last by its firmer consistence & its not attacking parts which the latter is disposed to do such as the muscular parts of the Thighs Legs, arms & Large joints. Treatment Cancer may be often diminished by low diet, small bleedings & the application of Leeches, the application of Vinegar & brown paper also internal remedies to allay pain such as those of the Narcotic tribe as Cicuta, Hyosciamus, Belladonna & opium also Arsenic. The last has been given internally & applied externally, It sometimes suppresses the growth of Fungus very powerfully & even sometimes radicates the disease. It should be used in this & in all other affections when fungus grows with great rapidity & especially when it proceeds from diseased bones. It must be used with caution. Mercury was recommended but was not found of much service. The best way to get rid of this disease is by extirpation. It seems the most preferable & may be

Resorted to when the disease has not extended itself to the Lymphatic Glands if it has the operation will most commonly be found to fail also when it has formed extensive adhesions

On Extirpation of Cancerous Breast

Previous to the operation the parts should be examined with great attention in order to ascertain the extent of the disease & the Surgeon in this as in every Operation for the removal of cancerous breasts & other parts should not merely cut away the parts already indurated & diseased but likewise some portion of the surrounding substance in which a diseased disposition may probably have been excited When situated in the breast the Operation may be performed in the following manner. The arm of the diseased side must be brought backwards so as to keep the fibres of the Pectoral muscle on the stretch. Two Incisions are to be made forming an Oval figure in which all the diseased parts are to be removed are included. The lower part of the skin ought to be first divided since if a wound is made in the upper part the effused blood covers the part below and prevents the Operator from seeing accurately. When the semi incision is made made it should be nearly in the direction of the

fibres of the Pectoral muscle. If the glands in the Axilla are diseased the incision should be high enough in that direction to allow their removal with the tumor. The best way to do this is to dissect the diseased Breast out first & then to dissect upwards without cutting it off & detach the hardened glands & Lymphatics in the Axilla which will be pulled down by the weight of the tumor. The vessels according as they are divided should be immediately tied as they will be found to retract under the different planes in which they are situated & cause violent Hemorrhage unless the patient is warm in bed & reaction established which it is extremely difficult to stop. As soon as the fingers can be passed above the axillary glands they are to be cut off but before this the cellular membrane connecting them is to be tied by a firm Ligature to prevent hemorrhage from any vessel that may be contained in it. This direction is of importance for if neglected the vessels will retract so high in the Axilla that the surgeon will be unable to secure their orifices. When the tumor is removed the edges of the wound may be brought together by stitches, plasters & compresses. We should never be in a hurry to close the wound until reaction is fully

established. For this purpose we may give some stimulants as a little wine & water. If you should not tie the vessels in the stilla immediately after they are divided & you find that they have retracted themselves into the adjacent parts your only resource to stop the hemorrhage will be to place a sponge in the stilla & leave it there until Suppuration is fully established. If in the course of time you find that you have left a diseased gland & that it puts on a cancerous disposition you should remove it—

On Cancer of the Eye

When it begins internally it most commonly arises from the retina If you look into the eye it appears of a whitish colour After a while a fungus begins to protrude through the pupil & sends forth granulations which shoot out externally Treatment The best way is to extirpate which may be done in the following manner The Eylids must be divided at the External & internal Canthus The tumor must be pulled out of the orbit with a Tenaculum They may be divided with a common Scalpel or Bistoury The orbit may afterwards be filled with lint to prevent hemorrhage

On Cancer of the Testicle

Cancer of the testicle sometimes proceeds from blows & other injuries done to these parts. The tumor sometimes attains a large size & sends out large fungous masses which grow with great rapidity. This disease is attended with severe Lancinating pains which shoot up in the direction of the Spermatic chord Sometimes this disease attacks the superficial parts In such cases it may sometimes be relieved by the external application of Escharotics but when it attacks the body of the testicle the only way to get rid of the disease is to extirpate it The Operation may be done in the following manner The first thing to be done is to make out that portion of the skin which is to be removed. This done you then dessect out the diseased testicle from its situation in the scrotum taking care that the incision should always be in the sound parts & that every thing diseased is left attached to the testicle having gone this far the Cord is to be examined & dipected up if necessary to come to the sound part. Whether in the exposed state it is now detached from the skin & surrounding parts can readily be ascertained All that is necessary to complete the Operation is the Tying of the Cord which is best done by passing

a needle armed with a common ligature through it; he the intestine between the portion composed of the vas deferens & the spermatic artery & the loose veins, which in a diseased state of the testicle & spermatic much enlarged & very vascular The ligatures are to be tied sufficiently tight to deaden the substance which is included in them & the cord is to be divided The cut edges of the scrotum are to be brought together & retained by Ligature, Adhesive plaster & Compresses of Lint according to the peculiar circumstances of the case

On Cutaneous Cancer

Cutaneous Cancer in the commencement resembles a wart in appearance. It most commonly attacks the Lips, the nose & in the beginning a small hard substance is situated under the cuticle which gradually enlarges in size & becomes extremely painfull more so than that kind which attacks the substance of the Glands When it becomes ulcerated a discharge of a thin watery ichor which excoriates the surrounding parts & burning sensation is felt in the parts of a peculiar & distressing [illegible] nature This disease should be removed before the Lymphatics, in the neighborhood of the parts, become diseased When the Lymphatics are

affected there is not so much chance of the operation being successful When situated in the lips the operation is the same as that for Hare-Lip.

On Cancer of the Uterus

The uterus is sometimes the seat of cancer It most common ly begins at the O Vinca Women who have not borne children are most subject to this disease. The first symptom is pain about the Os uteri a discharge of thin foetid fluid which excoriates the adjacent parts If examination is made the Os Uteri is found hard, ragged & unequal, severe pains of the lancinating kind will be felt extending towards the Loins & Back Treatment Little can be done by Medecines in this complaint unless palliating the Symptoms by the use of Opium & Injections of Warm Barley water also a watery solution of Opium thrown into the Vagina An Operation has been purposed & practiced with Success of passing needles armed with ligatures through the substance of the Uterus above the diseased part & pulling it down until it protrudes at the external orifice of the Vagina & cutting off all the contaminated parts. the ligatures should also be cut out & the hemorrhage stopt by the application of Styptics

On Cancer of the Tongue

The tongue is sometimes affected with this disease It resembles a raspberry in appearance It most commonly begins on its anterior parts & also on its posterior surface it attains a large size & sometimes extends into the pharynx. On the surface of the tumor there are a great many deep fissures The disease may be extirpated in 2 ways by the Knife or Ligature The latter mode is preferable It may be done in the following manner a needle armed with 2 ligatures may be passed through the substance of the tongue immediately behind the diseased parts The 2 ligatures may now be seperated & tied firmly at the basis of the tumor They may be tightened gradually until the tumor drops off This method has the advantage over extirpation as the latter is always followed by very serious hemorrhage.

On Cancer of the Penis

The Penis is sometimes the seat of cancer It begins usually with a wart a tubercle on the prepuce, Frenum or Glans This remains quiescent for many years but if irritated it becomes painfull, increases in bulk & sometimes attains a large size, Ulceration takes place attended with a discharge of foetid matter When the ulcer is of long continuance

the Urethra is exposed & fistulous openings form through which the urine flows & the disease is aggravated The Glands in the Groin & pubis enlarge & the disease extends in this course To distinguish Cancerous from venereal warts is not difficult & when the Cancer exists the penis should be removed before the disease has extended itself too far. The Operation may be done in the following manner a circular Incision is to be made through the Skin with a Bistoury about half an inch from the diseased part the Skin is to be drawn back a little & the Body of the Penis cut through with one stroke of the Knife At the part to which the skin has been retracted the vessels are to be secured by ligature Three principal vessels are to be looked for One on the dorsum of the Penis and one on each Corpus Cavernosum. An elastic Catheter is now to be introduced into the Urethra and the skin drawn forward so as to cover the stump and secured in this situation by strips of Adhesive plaster.

On Fungus Hematodes

This diseased is one of the most dangerous to which we are subject We know of no remedy for it unless an operation at a time, when we will find it difficult to make a patient submit to it, that is in its very commencement Mr Burns has called this disease Spongoid Inflammation from its elastic feel If a section of the tumor is made it seems to resemble brain in consistence at other times it appears glandular & bleeds profusely In the limbs it begins by a ~~bottom~~ small tumor which feels soft & Elastic if it is not covered by fascia In the beginning there is no pain but when it grows Larger the pain increases & is of that peculiar Lancinating kinds After awhile it becomes expansive In the commencement the skin over the tumor is not much changed in form or color at length it becomes uneven and irregular & changes to a livid color it becomes thinner & very much stretched Small openings now form in the irregular projections through which a bloody fungus comes forth which spreads with great rapidity After Ulceration Takes place the lymphatics become diseased This affection may be known from cancer by its being softer by its progress with greater rapidity also by attacking

part which cancer never attacks No part seems exempted from this dreadful disease It attacks the Brain, Lungs Liver, Spleen, Thyroid Gland & is considered as a constitutional disease It seems to arise from the vascular System When it begins in the eye if you look into that organ it appears of a silvery-hue after which it comes through the pupil & bursts the Cornea or Tunica Sclerotica Children & young persons are most subject to this disease while old persons are subject to Cancer Fungus of the eye seems harder than Cancer of that Organ Treatment Very little can be done in this disease if the eye is affected it ought to be removed If it should commence in the muscular parts as the thigh, Leg, Foot, Arm or Forearm Amputation is to be resorted too as the only remedy It must be done before the Lymphatics become affected.

On Gonorrhoea or Clap

This disease begins in the Urethra near the Glans The first symptom is a itching & slight pain in making water & the Glans becomes swelled It is uncertain at what period the discharge takes place sometimes in 3 or 4 days sometimes later In the beginning the discharge is thin & watery of a white color & small in quantity increasing gradually In the second stage

stage it becomes thicker & of a yellowish color In the last stage it becomes more thick & of a greenish hue These are the most constant symptoms attending this disease but there are others which sometimes take place such as Chordee Ulceration of the body of the penis & swelling of the Inguinal Glands The Bladder sympathizes producing a constant inclination to evacuate the urine at other times the Rectum producing a distressing Tenesmus but the most frequent Sympathetic Symptom attending this disease is Hernia Humoralis When this last symptom comes on the discharge from the Urethra is put a stop to When the discharge returns the swelling abates & leaves an induration of the body of the testicles which continues a long time At other times the disease puts on a chronic appearance commonly called Gleet which he calls Chronic Gonorrhoea He suspects that this discharge often proceeds from Stricture of the Urethra in Women this disease is not very troublesome in general but is sometimes exceedingly painful This disease is thought to proceed from inflammation of the Mucous membrane of the Urethra In women it is difficult to distinguish this disease from an affection called Fluor Albus in Gonorrhoea the discharge is more constant

the pain is greater in making water & the other Symptoms are more distressing Whereas in Fluor Albus the discharge will sometimes cease for 2 or 3 days & then return The womans countenance is of a Sallow appearance & she is often affected with dyspeptic symptoms. The Poison of Gonorrhoea & Syphilis is considered by Gibson to be entirely different. Treatment When the Inflammatory symptoms run high & the Burning of Urine is distressing the pulse Strong & full & the bowels affected Bleeding & purging will be necessary The latter may be effected by the neutral Salts & they may be given in small quantities & frequently repeated The patient must be kept on a low diet & be prohibited from the use of Spirits He should be kept in a recumbent posture in bed & the penis laid back on the Abdomen Poultices of Bread & Milk should be applied After the inflammatory symptoms are abated mild injections consisting of Flaxseed tea milk & water, rose water & sweet oil The injections may be thrown in as far as possible Sometimes the Glands are so swelled as to prevent the introduction of the Syringe In this case the poultice of bread & milk may be applied they will be found serviceable to diminish the Swelling After this has subsided the above injections may be used.

After which they may be changed for stronger ones as a solution of Sugar of Lead To 6ph Zinci Nitrate of Silver which may be used in the following manner take a small quantity of the Caustic about the size of a pins head & rub it up in a small quantity of Sweet Oil on a plate so as completely to dissolve it you may then take a bougie & rub it over the surface & introduce it into the Urethra The first application gives pain but will be found of great service & sometimes a second application will be solicited by the patient A weak solution of Nitric Acid has been found useful as an injection The patient may drink frequently a Solution of Cr Tartar freely diluted with water When chordee takes place nothing Taken has been found of more service than Camphor it may be given in doses of 8 or 10 grains on going to bed Opium has been found useful Camphor has been serviceable when mixt with the poultices & applied externally to the penis When the bladder is affected the patient must be put into the warm bath Opium may be given to relieve the pain if the water does not flow it must be drawn off by the Catheter When the accompanying symptoms produce tumefaction Injections of

Starch & Laudanum may be thrown up If Hernia Humoralis takes place fomentations & poultices may be used & the testicles kept continually supported The patient may be purged an even bleeding may be requisite Emetics have been found to diminish the swelling If it should become indolent Ciecta combined with calomel may be used as it has been with success. If the Bladder should continue irritable as seem de a half drachm of pure Opium may be given three times in the day When it continues a long time an Opiate plaster may be applied to the Loins or a small blister to the Perineum. When it terminates in Gleet we may give the Tr of Cantharides 10 drops 3 times a day. The Balsom Copaiba has been employed We may at the same time use an injection of Mur of Merc. If swelling of the groins should come on they may be treated as a simple phlegmonous Inflammation by cold applications Mercury is of no service.

On Syphilis

This disease is a consequence of a Specific morbid Poison which being applied to any part of the body produces effects either to the parts on which it is applied or on various parts of the system in consequence of Absorption Chancre takes place most commonly on the penis but may occur on other parts of the body which if it does is commonly more painful than on the penis It seems to attack the latter part in different places as the Skin Glans, prepuce, Frenum it seems to have a disposition to attack the hollow parts when it takes place on the penis as behind the Glans or at the Frenum which last part it most commonly destroys A Chancre has commonly a thickened base & if the Glans penis is affected a small simple pull of matter forms without much hardness or swelling When the disease occurs on the Prepuce or Frenum the effects of the inflammation are more visible the skin is gradually burned into pain The surface of the prepuce is in some cases excoriated and afterwards ulcerates In others a small, simple pimple precedes the formation of the ulcer then a thickening of the parts take place & with the effect remains altogether specific it is very

Circumscribed & its edge terminates abruptly The base of the Chancre is hard & somewhat prominent Sores of this discription seated on the glans sometimes cause profuse bleedings In women chancres are generally situated on the Chancre Labia & Nymphae sometimes in the Perineum but rarely in the vagina When the prepuce is contracted so that it cannot be drawn back over the Glans it is called Phymosis When this happens to a patient laboring under Chancre it is very painful He considers Chancre in the beginning as local but the disease becomes constitutional in consequence of the virus being absorbed from the chancre The of constitution may become affected without the previous appearance of the Chancre But this seems doubtfull as he thinks the Chancre may passes unnoticed by the patient in consequence of its smallness After a chancre has existed some time a hard cord may be felt extending along the back of the penis to the inguinal Glands which swell causing a bubo The chancre sometimes heals after the formation of a bubo After the formation of a bubo the constitution is not considered to be affected After it has taken on the Mercurial process he considers

that there is no difference between it & Chancre. We may almost pronounce the patient to be laboring under the Secondary form of Syphilis After the ulceration continues sometime it assumes a yellow color & the constitution becomes affected in the following order the Skin, Throat Fascia & Bones When it attacks the skin it comes on in the form of copper colored Blotches from the size of a 12½ cent peice to that of a half dollar or even a dollar These sometimes seem to get well & form scales which fall off but a number of fresh ones make their appearance until at length the parts are exausted & an Ulcer forms When it attacks the throat an ulcer of an oval shape appears covered with a white coagulum which is very difficult to remove It mostly begins at the tonsils which seem as if their substance was dug out. The ulcer is not very painful in these parts it sometimes proceeds with great rapidity If this has been preceeded by the affection of the cuticle & chancre we may almost pronounce the patient to be laboring under the secondary forms of Syphilis When the disease attacks the bones it does it in the form of indolent swellings which for the most part are exceedingly painful they are

called Venereal Nodes When it takes place in the Bones of the Cranium it mostly begins in the Parietal bones causing them to become carious & even destroying the membranes of Brain There are other forms of this disease such as venereal warts which for the most part are very painfull Women are the most subject to this form of the disease They may be known by having a broad base top & narrow base Condylomatous tumors sometimes appear about the Anus at other times affections called regada

Treatment

That Chancres are local affections is confirmed by the circumstance of their admitting of being cured & destroyed meily by Local Treatment. It is a question whether mercury should ever be applied locally to Chancres or not. Gibson considers in the cure of such sores there are 2 objects to be aimed at one is the cure of the chancre itself the other is the prevention of the Contamination of the System When we find a chancre forming we should do our utmost endeavour to destroy it. 2 methods have been proposed viz Extirpation & escharotics the latter is the best and safest as the former is apt to be followed by hemorrhage

especially if it is seated on the Glans For this purpose we may employ the Lunar Caustic which may be made fine on the top & the surface of the Chancre touched with it. By this means we may often prevent the absorption of the Virus & formation of a Bubo even after the chancre is fully formed We should never trust to this means alone but should give Mercury in some form For this purpose we may give calomel in small doses of 1 or 2 grains 3 times a day If it should purge it may be combined with Opium The blue pill may also be given it is thought to be superior to Calomel it may be given in doses of 5 grains morning & evening We should never salivate a patient severely as no good can result from the practice but sometimes very dangerous consequences have been the result of such rashness. When the patient's mouth is beginning to be affected the quantity of Mercury should be diminished or entirely left off Frictions with the Mercurial Ointment is considered a good way if not the best of bringing the constitution under the effect of Mercury It certainly is when the internal exhibition of it disagrees with the patient For this purpose we may take a half drachm morning & evening to be rubbed on the inside of the thighs a

Thighs If it should cause a swelling of the glands of the
Groin or Armpit which it will often do we must discontinue
the use of it on that side when the swelling appears, but
may continue the use of it on the parts before mentioned
until the patient is under its influence. As a local applica-
tion to chancre the dr thinks the Black wash
the best we can employ it is made in the following manner

℞ Sub Mur Hydr. ℈j
Aq. Calcis ℥j
Mix

it may be applied 3 or 4 times a day
if the Chancre becomes indolent
the Comp^{d} Ointment of Acet Mumbi
may be used If after all our endeavors a bubo should
come on we must try to prevent its coming to Suppuration
In this purpose the patient should be confined to bed
& a blister which is found very servicable should be
applied over the part & dress it afterwards with Mercurial Ointment
Emetics have been found useful in dispersing these swellings
if after all it seems disposed to suppurate we may employ
poultices of Bread & milk to hasten its termination.
The are 2 modes recommended for opening such tumors
the knife & caustic the former is preferred the skin
should be allowed to become as thin as possible before
any opening is made It may afterwards be dressed like any

common abscess when the secondary forms of this disease
shew the Merc. may be employed in the same way as for
Chancre The Nitric & Muriatic Acids have been recommended
in the secondary forms of this disease. These last have
been used in the form of bath the patients feet may be
bathed sponged with it Swains panacea has been found
extremely serviceable in the secondary forms of this disease
Their states. 2 cases in which all the ~~cases~~ preparations
of Mercury were employed without any effect. He desired
the first to try what effect Swains Panacea would have
the patient got entirely well under the use of it
The second also got well. Fumigations have been recommended when the patients cannot be brought under the
influence in any other way. A disease called Erythema has been brought on by the use of Mercury
It comes in the form of blotches over different parts as the
Arms, Thighs Breast &c attended sometimes with great
debility. Gibson says Mercury will cure this affection

Caries

Caries may be defined to be an ulceration of the Bony parts The spongy bones are most liable to this affection as the head of the Tibia &c It may also occur in the bones of the Carpus & Tarsus Severe pain is experienced in the commencement. ulcers make their appearance & when an examination is made the bones are found diseased & fungus comes forth sometimes with great rapidity Acids have been recommended for the purpose of destroying the growth of this fungus but have have been found useless Nitro muriatic Acid has been given internally as well as applied externally Equal parts of White Arsenic & Sulphur will be found more useful in removing the fungus after which we will be better able to get at the diseased bone & should remove it.

On disease of the Vertebræ or Curved Spine

Children of Scrofulous diathesis are ~~diseased~~ most subject to this disease. Adults are occasionally liable to an attack When it attacks children the following symptoms are observable in its commencement. The child is listless & easily fatigued on making any exertion or in exercise He throws his head into his mothers lap as if unable to bear the weight of it When walking his legs

suddenly cross each other & he is thrown to the ground
then is difficulty of Breathing a tightness at the Scrobiculus
Cordis When seated the legs are crossed & the feet carried under
the chair As the disease advances an inability to move
the limbs comes on which terminates in complete
paralysis The sensation at the Scrobiculus Cordis is
increased & feels as if the person was bound by a rope a disagreeable
sensation is experienced in the Muscles of the part & are
sometimes violently & contracted. the digestive functions
become impaired and an inability to retain the urine and
feces is experienced If the patient be an adult he complains
of slight pain in that part of the Vertebra which is
affected which is sometimes mistaken for Rheumatism
If the vertebra are examined they are found carious also
the intervertebral substance is found affected The older
surgeons believed the disease to proceed from dislocation
of some one of the Vertebra This disease at times comes
on suddenly at other times very gradually The cause
of this affection is very obscure It mostly happens
in Scrophulous persons Treatment The cure of
this disease is very difficult. it may be sometimes
cured in 2 or 3 months while at other times it will

take as many years & even in this length of time it cannot be accomplished. In the commencement of this affection before paralysis has taken place it will be necesary to confine the patient to a horizontal rosture on a Mahras keep him on a low diet administer purges of Jalap & Cream Tartar & apply a blister over the affected part The patient may be brought in the air but should not be taken out of the recumbent posture. When the Blisters have had their full effect we should then employ issues on each side of the diseased vertebra They may be made by rubbing some Lunar caustic & rubbing it on the surface until it becomes of a brown colour in the course of 3 or 4 days the eschar will seperate, the place a few peas & place them in the part. then apply a compress & over it a bandage to keep it firm. If a fungus should shoot out we may keep it under by the application of the vegetable Alkali We should at the same time continue the use of the Jalap & Cream of Tartar after the patient is relieved it will be found necesary to use Artificial Suppers

On Disease of the Hip Joint

In almost all cases the head of the Os Femoris is the seat of the disease. There are 2 stages in this affection in the 1st the limb becomes lengthened in appearance The patient mostly complains of pain in the knee joint which is very apt to take the attention of the practitioner from the real seat of the disease The Dr relates a case when a surgeon was to see a child laboring under this disease he applied various remedies to the knee without any effect As Lady (wife of a Surgeon who had considerable practice in such cases) told him that it was not seated in the knee but at the hip joint at which he became vexed & left the patient. The Dr was afterwards called in and found it to be as the Lady had stated The pain in the knee is owing to the pressure of the Ischiatic Nerve When the limb is examined it is found smaller than the other. the Nates are flattened, the leg semiflexed & the patient cannot place his heel on the ground he mostly supports the weight of the body on the sound side. In the 2nd stage the limb becomes shortened in consequence of a spontaneous luxation upwards & Backwards on the Dorsum of the Ilium In the first stage of the disease the parts about the joint are found thickened & inflamed

In the advanced stage of the disease a quantity of Matter is formed in the cavity of the Joint & the Cartilages & ligaments are entirely destroyed. After the Luxation of the head of the bone out of the cavity Nature sometimes agglutinates the head of the bone to the Ileum. It is in general very difficult to arrest the progress of this disease. It sometimes proceeds from blows at other times from sleeping on the ground & being exposed to a Cold atmosphere. But it often comes on spontaneously without any evident exciting cause. In this disease the pain is increased by pressing on the anterior part of the Bone near the great trochanter. Treatment. In the beginning of the disease the patient must be kept on Low diet. he should be occasionally bled, leeches may be applied to the part & he should be purged every other day with Jalap & Cr. Tartar. Issues must be placed on the anterior part of the limb. If matter should form we should heal up the issues. The patient must remain in a horizontal position and the limb kept in a state of Extension. We may employ splints for this purpose they may extend from the Pelvis below the Knee to the ancle joint care should be taken to attend to this latter direction as the the patient otherwise will keep it in an semiflexed state.

On Sprains

Sprains may arise from several causes in some instances are considerably lacerated but they are in most case over-stretched An Ecchymosis is apt to follow injuries of this kind Which in the beginning is of a purple but after a while turns a yellow colour The Treatment of these injuries is sometimes difficult especially in those of a Scrophulous habit as it may often prove an exciting cause of tedious & distressing affections of such Joints The patient must be kept quiet and the limb extended The antiphlogistic regimen must be adopted Bleeding will sometimes be necessary A blister may be applied to the injured part & the limb kept in a Position which will not retard the circulation

On Anchylosis

It denotes an intimate union of Bones which are naturally & naturally connected by movable kind of Joint. Its causes are & are different as after Sprains, fractures or any other exciting cause of Inflammation There are 2 kinds true & false In the true kind the Ligaments, cartilages &c are absorbed It is most apt to take place in the Ginglimes Joints as the Knee & Elbow In injuries of the superior extremities if we dread Anchylosis the Elbow must be

kept in a flexed state if the inferior it may be kept extended In the true anchylosis no relief can be afforded In the false the limb may be gently moved & rubbed with some kind of Liniment

On Cartilaginous Substances in the Kneejoint

Cartilages often form in the joints but for the most part in the knee joint several have been found in this situation When they are cut into they resemble Cartilages in Consistence at other times they have been Ossified The causes of their formation are obscure but is for the most part attributed to Cold They are found within the capsular ligament & sometimes moves to all parts of the joint but it is often confined to one part Mr Hunter says that in consequence of inflammation Coagulable Lymph is thrown out by the vessels into the cavity of the joint which becomes vascular & forms Cartilage If there is any disposition to inflammation it is always increased by these foreign substances They are for the most part attached by a thin pedicle to some part of the lining membrane by which vessels enter for its nourishment In the beginning they do not cause much uneasiness but when they grow to some size they become distressing to the patient

Treatment. While these substances continues small & causes no uneasiness they should not be meddled with But when it becomes large & causes pain & irritation it should be removed by an Operation In some instances a great degree of Inflammation follows Operations of this kind at other times very little. Disputes have arisen where the incision should be made but this must be determined by the seat of the substance when you have a choice the inner side is to be preferred The Surgeon moves the substance to that part of the joint where he intends making his incision. he grasps the substance firmly in his left hand & makes the incision immediately over it & afterwards takes hold of it with a pair of Forceps & extracts it. Gibson thinks it is best not to unite the wound by the first intention as an accumulation of the Synovial Fluid is apt to take place which may be discharged through the Opening Symptoms & Tetanus sometimes come on after the Operation If such Symptoms make their appearance large doses of Opium must be resorted to

On Spina Bifida

This is a congenital affection It is sometimes situated on the Spine at other times on the Cranium It is caused by a deficiency of the Bony matter In some children it is very ~~too~~ large in others it is very small. Children seldom live longer than five or six years When the tumor is examined it appears to contain a clear limpid fluid which is covered with a thin ligament and skin By making pressure on the tumor when it is seated on the Vertebral Canal we can return it but it will for the most part bring on convulsions

Treatment M^r^ Cooper was the first to operate for this affection He punctured the tumor with a fine needle & the patient got well Others have not been so successfull Gibson says he operated in the same way but the patient died in consequence of the inflammation & Suppuration which followed but he says the Operation may be tried when no Symptoms denoting Hydrocephalus are present and the Child healthy in other respects In cases of the foregoing description M^r^ Abernethy was the first to suggest the propriety of using

Pressure

On Hydrops Articuli

Jan 9th 1823

This disease attacks persons advanced in years. It mostly takes place in the knee joint It sometimes arises from Local injuries, Cold &c but is in the most part accompanied by general Dropsy It is sometimes Symptomatic of Typhus It may be known by the swelling being perceptible by the side of the Patella and the Fluctuation In general it is not very painful. Prepare is recommended

On White Swelling

Jan 10th 1823

In most instances there is inflammation of the Synovial Membrane Sometimes the Cartilages are absorbed at other times ulceration takes place But it often happens that a great quantity of Matter is thrown out. It happens most frequently in Adults A difficulty of motion is first perceived after which pain comes on & increases to a great degree which prevents the patient from getting Sleep for several nights together Treatment

We must keep the patient on a low diet & have recourse to evacuants as bleeding, purging, the topical application of Leeches & a Blister which may be kept running for some time by the use of Savine Ointment After the Inflammation has subsided the patient must be

kept still & not allowed to take much exercise. When the Inflammation goes on to Suppuration a small quantity of Matter is formed which may be absorbed but which sometimes produces Ulceration If the constitution is good in other respects & no hectic symptoms present we should endeavor to save the limb but should the Suppuration be extensive & attended with hectic Symptoms Amputation must be had recourse to but it often happens after the limb is amputated that the Patient is carried off by Phthisis Pulmonalis or the disease attacks some other parts.

On Exostosis

This disease is met with in the long bones but- is occasionally met with in the bones of the cranium It is divided into the Tuberculated, Spinous & Lamellated This affection is sometimes brought on by Rheumatism, Syphilis &c It is to the most part considered a local disease When it comes on from the latter cause the usual remedies for that disease may be employed We may employ blisters if it arises from Rheumatism - we ~~kno~~know of no remedy that will be likely to succeed unless removing it by an Operation which may be done with Heys Saw, the Spring Saw.

a ever by the Perineum We should not resort to an Operation
for unless the swelling makes pressure on some Great
artery or nerve thereby Causing great pain and Uneasiness.

On Osteosarcoma

This a most formidable disease It appears like a small
tumor which gradually enlarges sometimes to an enormous
size When cut into the Cavity of the Bone is found filled with
a fungous, flushy substance It is considered as a constitutional
affection Gibson relates a case where he amputated the
leg for this disease It came on after jumping; in the form
described The patient got well I continued so for eleven
months when suddenly while walking the streets the
he was seized with a difficulty of breathing & died a
short time after with all the symptoms of Phthisis
Pulmonalis On Examination several of the bones were
found filled with this flushy substance & expanded
in size Amputation is the only remedy
in this Disease

On Spina Ventosa

By the above term is meant an enlargement of the
Bone with a quantity of Matter contained within its
cavity. This disease comes on without any evident cause

When cut into to the bone resembles a Mans chest It differs from Osteosarcoma in the bone of the latter being found filled with a fungous like substance the only remedy is removing the diseased part of the bone with Hey's Saw a the saw invented by Dr Gibson a the Trephine

On Necrosis

This disease is most to met with in Young subjects. It appears for the most part in the middle of the long bones as the Tibia, Femur &c but may occasionally occur in the flat bones as those of the Cranium In this disease a portion of new Bone is forming around the old whilst it is decaying It comes on in the following manner. pain is felt at the part which gradually increases to a great degree, the part swells & becomes inflamed, Matter forms which is discharged by fistulous openings If the part is examined with a probe the opening may be discovered leading into the cavity of the bone. The disease goes on for a number of years & sometimes Fungus Shoots out with great Rapidity

Treatment

If we are called in when the inflammatory symptoms are present we must subdue them by the usual remedies for inflammation

When Suppuration is established and it becomes necessary to remove the diseased parts it may be done with a Trephine or Key's Saw We should not interfere until we see that Nature has done her part – & seems incapable of doing any more The strength should be supported by the usual remedies

On Injuries of the head

The skull may be fractured at all most any point – It may be extensive or it may be a fissure The injury is not dangerous in itself but is so in consequence of the injury done the brain & its appendages

The skull may be fractured without producing any dangerous symptoms Sometimes a large portion is driven in and produces pressure on the Brain at other times a stillated fracture is produced. sometimes counterfissure is produced for instance a person receives a blow on the upper part of the Os Frontis and produces a fracture on the Orbitar plate. The inner table may be fractured without any external appearance of it In all injuries of this kind when no urgent symptoms supervene such as those

arising from Compression from part of the bone being driven in or from the extravasation of Blood the Trephine should not be employed the patient should be copiously bled and purged and kept on a low diet The Antiphlogistic regimen should be observed for at least a month & all other means necessary should be employed to prevent inflammation of the Dura Mater or brain from taking place

Sometimes Concussion of the Brain takes place suppose a patient to fall from a height and alight on his feet he is stunned at the moment of the accident, his pulse is small and tremulous his extremities are cold, he lies quite stupid but his breathing is not oppressed for he seems as if enjoying a perfectly natural sleep. The Apoplectic Stertor which happens in Compression of the brain is not to be found in Concussion by which symptom they may be distinguished from one another There is for the most part a vomiting in Concussion which is absent in Compression The pupil is contracted. If the eyelids are opened the patient will shut them again in a

peevish manner Treatment

The indication in Concussion is to establish the reaction which may be done by warm applications to the extremities, by wrapping the patient in blankets and putting him to bed After the reaction is established the patient must be kept on a low diet: he should be bled and purged and all other means may be employd which will prevent Inflammation of the brain and its membranes This may be termed a simple state of Concussion Sometimes the patient will remain in a Comatose state for three or four days and the pupils considerably dilated We should never employ stimulants in this affection as they are very apt to excite an inflammation of the brain & its membranes which is very likely to follow in injuries of this kind

In all such cases the hair should be shaved off as if we want to make an examination it will be much more convenient we will also have an opportunity of making our external applications have a better effect. Sometimes Compression takes place in consequence of the Skull being driven in by the force

applied sometimes in consequence of Extravasation by the rupture of an artery of the brain or dura Mater The symptoms are the following The muscles are relaxed the breathing is difficult and stertorous the pupils are dilated and will not contract with the strongest light, the stomach does not shew the least sensibility When it proceeds from an Extravasation of blood it may be known in the following manner a person receives a blow on the head by which he is stunned and becomes insensible after a while he recovers his senses but afterwards relapses into a state of insensibility In such a state of things we may pronounce that the Symptoms proceed from Extravasation of blood from some blood vessel within the Cranium. When it is produced by some part of the bone being depressed pressing on the brain the patient will not recover his senses but the ~~patient~~ symptoms will take place instantaneously & will continue until the patient is relieved by an Operation Our chief indication is to apply the Trephine on the injured part. If we do not relieve the Symptoms of

Compression we may perforate in the course of the chief artery of the Dura Mater Sometimes after extravasation the Pericranium will be found separated from the Cranium underneath and will not bleed when scraped. Extravasation may take place and get perfectly well without any Operation but cases of this kind are very rare: When it happens that blood is poured out on the surface of the brain immediately under the dura mater we should let it out by a crucial incision with a Lancet Patients seldom if ever recover from such a state After an injury of this kind when the patient is comatose the pupils dilated, breathing stertorous and the stomach insensible to impressions of all kinds we should apply the Trephine to the injured part but when the patient is sensible and answers questions put to him in such cases we should perforate the Cranium even if there is a depression of part of it. We should keep the patient on a low diet and bleed him frequently taking away about ten or twelve ounces each time. Purges of the Saline kind may be administered. The head may be shaved and cold applications made to it.

After the use of all our remedies inflammation of the Brain or Dura Mater will sometimes come on which may be known by the redness of the face, the flushed face, the redness of the eyes, the restlessness of the patient, the drawing up of the knees to the Abdomen, the dreadful headach, & unquenchable thirst. The only remedy is bloodletting in moderate quantity frequently repeated, purging, Low diet, applying cold to the scalp. After all our endeavors it sometimes happens that matter is formed on the inside of the Cranium. It may be known by the Pericranium separating from the Cranium by a circumscribed puffy tumor. If the wound, is situated over the part of the Cranium covering the suppuration of the Dura Mater, the edges lose their vermilion color & become pale & flabby. This demands the application of the trephine in order to get at the matter beneath the bone. If the matter should be situated beneath the Dura Mater it may be carefully opened with a lancet. The patient must be kept on low diet. When the artery of the Dura Mater is opened we should endeavor to tie it by previously applying the Trephine. If the Longitudinal Sinus is wounded we may stop the hemorrhage by applying a compress of lint on the wounded part. As I have already explained it is not the injury done the bone which will

cause you to apply the Tuphine but the injury which is rec'd and communicated to the brain In cases of Compression when a person receives such an injury if you prep on the part injured you will cause the patient a great deal of pain and will answer questions relative to the injury with distinctness but if the part is depressed or pressure of any kind is made on the surface of the brain or Dura Mater in such a case if we prep on the part so injured we cause no pain The patient lies insensible, his breathing stertorous & laborious the pupils in most cases dilated It will be seldom necessary to employ the Tuphine but it may sometimes be necessary in consequence of pressure on the brain by the depressed bone or extravasated blood or Matter formed and preceded by inflammation We may sometimes relieve the patient without the use of the Tuphine as in cases of fracture with extravasation by insinuating some substance between the fracture and separating them a little distance from each other and assisting the flow of the extravasated blood.

In cases of depression we may sometimes succeed in elevating the depressed portion of bone without the application of the trephine also in cases of Spiculæ of bone wounding the Dura Mater When blood is extravasated under the Dura Mater and we apply the Trephine it will be found to rise In such cases we make a carefull incision with a Lancet and then introduce a director on which we make the incision any length necessary. Patients will seldom survive an injury of this description. When we think it necessary to apply the Trephine we must avoid certain parts as the base of the Brain when it cannot be applied by any means also if possible the course of the sagittal Suture also the temporal bone When we find it necessary to apply it **over** the Frontal Sinus we should always use two trephines a large and a small one we make the first perforation with the large one which will enable us to make the other with facility. For the Operation See Dorsey's Surgery &c.

On Fungus Cerebri

After the operation of trepanning a disease called Fungus Cerebri is apt to follow Mr Abernethy thinks it proceeds from coagulated blod & Mr Charles Bell thinks it as an organised substance Gibson thinks the latter opinion the most probable as it bleeds very profusely when cut into it is not painfull. The best way to heat this disease is to remove it with the knife afterwards making moderate pressure and keeping down the growth with Escharotics

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